Riparian Vegetation Management Task Force meeting minutes Monday, January 14, 2008; Lincoln, Nebraska

1. Call to order – Chairman Charles Brooks called the meeting to order. Roll call was taken. Task Force members present:

Dr. Gary Cunningham (late arrival) Mike Arps Kent Aden John Erickson Mike Clements Rich Tesar Ron Bishop Mike Sarchet Greg Ibach (late arrival) Kirk Nelson Charles Brooks Gloria Erickson Mike Linder (late arrival) Senator Don Preister Russ Shultz Senator Cap Dierks Ann Bleed (late arrival) Senator Tom Carlson

Task Force members absent were:

Jim MillerSenator Deb FischerTom ThompsonSenator John Harms

Task Force members who sent alternates were:

Dr. Scott Josiah sent Dennis Adams

Guests present included: Xinhua Zhou Kyle Hoagland **Durelle Scott** Lorrie Benson John Thorburn Suat Irmak Merle Illian Kyle Herrman Ken VonBuettner Shashi B. Verma Ayse Irmak Kyle Jackson John Lenters Tala Awada Erkan Istanbulluoglu

Annabel Lee Major Bob Bettger

Derrel Martin NDA staff members Rich Reiman,

Jennifer Rittenhouse-tenBensel Mitch Coffin, and Ted Tietjen Bobbie-Kriz-Wickham.

Milt Moravek

- 2. Brooks noted the availability of a copy of the Nebraska Open Meetings Act. He noted for the record that notice for today's meeting was published in the *Omaha World-Herald* on December 23, the *Kearney Hub* on December 23, and in the *McCook Daily Gazette* on December 24.
- 3. Brooks opened discussion on the minutes from the November 14, 2007, meeting. Senator Preister made a motion to approve the minutes. Sarchet seconded the motion.

Roll call vote: In support of the motion: Aden, Clements, Bishop, Brooks, Shultz, Arps, John Erickson, Tesar, Sarchet, Nelson, Gloria Erickson, Senator Preister, Senator Dierks, and Senator Carlson. Voting against the motion: none.

4. Under Old Business, Mitch Coffin reported that the Task Force's interim report to the Governor and the Legislature was delivered on December 14. He thanked the group for their input on the document.

Ann Bleed and Mike Linder arrive.

5. Under New Business, several University of Nebraska-Lincoln researchers were present to review for the Task Force ongoing research related to riparian vegetation.

Greg Ibach arrives.

a. Kyle Herrman shared information on a research project designed to look at the "Impacts of Riparian Vegetation on Water Quantity, Quality, and Stream Ecology" in the Republican River basin. The project has three main objectives: (1) Measure evapotranspiration (ET) rates along a transect of the Republican River before and after exotic vegetation removal; (2) Estimate ET savings of vegetation removal using a regional water balance model; and (3) Determine how riparian vegetation removal affects water quality, stream function, and channel morphology.

The research group currently is involved in site selection, looking for areas where there is no active vegetation removal and where there is consistent water flow. Through February and into March, they intend to complete site selection and install field equipment.

He said they will collaborate and share data with other researchers who are conducting projects in the basin.

b. Derrel Martin shared information on a research project designed to look at "Water Use of Invasive Species" in the Republican River basin. The primary components of this project are to: (1) Measure baseline ET from riparian grasslands; (2) Measure ET of Russian Olive; (3) Measure ET of red cedar; (4) Measure ET of riparian systems using remote sensing; (5) Integrate these measurements with physically based models; (6) Survey species composition across the basin; and (7) Measure ET across the basin.

The group has four sites, including two near Benkelman, one near Bartley, and one near Franklin. He explained the landscape features of each site as well as what they hope to focus on at each site.

Senator Preister commented on the importance of the research efforts in order to provide some scientific validation for the riparian control efforts.

c. Tala Awada shared information on her role in the research projects, which will be to calculate plant transpiration, which is a component of ET, using the sap flow method. The outcome of her research will be to quantify water consumption in

riparian invasive species at different developmental stages. Three species will be studied as a part of her research: cottonwood, red cedar, and Russian olive.

Dr. Cunningham arrives.

d. Ayse Irmak shared information on a research project designed to look at satellite remote sensing-based estimation of land surface ET. The objectives of her project are to: (1) Quantify spatial distribution and seasonal variation of ET in Nebraska; and (2) Modify remote sensing energy balance models for improved prediction of daily and seasonal ET.

Through existing work she already has determined several challenges that need to be addressed, including calibration of the models against measurements over dryland and irrigated conditions, testing sub-models to estimate things like soil heat flux under various agro-meteorological conditions, and scaling methods to extrapolate instantaneous ET to daily and seasonal ET.

She already has reached several conclusions, including that land surface energy balance models can be a viable tool for quantifying daily and seasonal ET at a regional scale.

6. Annabel Lee Major gave a report on the Nebraska Invasive Species Project. Her role in this project is to coordinate invasive species management across Nebraska. A few of the goals of the project are to map potential spread, impact and risk of invasive species; provide actual and potential map of invasive species range; develop a cumulative web resource; and increase communication and collaboration among agencies involved in invasive species management.

She is working with a number of partners on this project. As part of her efforts, she is coordinating an upcoming Invasive Species Conference in Lincoln, February 6-8.

- 7. Work groups reports were provided.
 - a. Kent Aden presented information from the Vegetation Management and Treatment Work Group, which met January 9. He said the focus of the last meeting was to learn about what is already being done in the state relative to vegetation management and treatment. He said the work group received a report from Kenny Dinan with the U.S. Fish and Wildlife Service regarding vegetation management projects that he has helped coordinate, the majority of which have been mechanical control projects.

Aden said the group has been receiving input on how to best manage and treat vegetation. They are looking at creating model management and treatment projects across the state, which will help generate information that can be used to create a best management plan for the state.

b. Russ Shultz presented information from the Streambed Ownership Work Group, which met today prior to the full Task Force meeting. He said the group plans to survey Platte River counties regarding how each county handles streambed ownership issues. Results of the survey will be shared with the full Task Force.

He noted another continued focus of discussion is the assessment of whose responsibility it should be to maintain riparian areas once vegetation has been cleared.

- c. Charles Brooks encouraged all work groups to continue to meet and move forward with discussion and development of policy suggestions for the full Task Force to consider.
- 8. The Task Force received updates on the Riparian Vegetation Management Grant Program projects.
 - a. Merle Illian provided an update on the Eastern Republican Riparian Improvement Project. He said that during the fall, roughly 1,100 acres of vegetation were treated in the Republican River streambed between Harlan County Reservoir and the Kansas state line. One hundred eighty landowners were contacted and involved in the project. He said it appears the control project was successful.

The group is moving ahead with other parts of the improvement project, including preparing for a deep disking project on channel islands over a two-mile trial plot, and letting bids for channel debris removal.

He also said they are working with eight producers on a riparian grazing project.

The group is in the process of surveying landowners along the river from Harlan County Dam west to Furnas County to determine their needs regarding riparian vegetation control. This information may be used to develop another grant proposal.

b. Mike Sarchet provided an update on the High Plains Invasive Species Project. He shared photographs of mechanical control work that has been done and noted that while it seems to have been effective, the group is somewhat concerned about the cost associated with the work.

He said they floated the river this fall and found phragmites infestations, which will be treated this spring.

He noted the importance of the partnerships and contacts he has been able to make as a result of the LB 701 task force and grant program.

He showed photographs and explained a mechanical control demonstration project that they conducted using Fecon equipment. The equipment is able to grind trees in place, and the High Plains project leaders wanted to compare its cost effectiveness to the equipment used in their previous mechanical control project.

The Task Force discussed the cost comparison per acre between the two types of mechanical vegetation removal.

c. Jennifer Rittenhouse-tenBensel provided an update on the Western Republican Riparian Improvement Project. The group currently is accepting bids on a

mechanical tree removal project, which should begin in late February. Some chemical treatment was conducted last fall. She said while the group has tried to get good landowner participation, absentee landowners and those that use their ground primarily for hunting have hampered participation rates. She said they are conducting some of their mechanical removal work near bridges as a way of educating the public and encouraging more participation.

9. The Task Force discussed the scheduling of future meetings. Mike Sarchet invited the group to meet in Gering in association with Invasive Species Control Summit in May. Senator Carlson suggested the Task Force meet Thursday, May 8, in the afternoon, following the conclusion of the conference. Senator Carlson said he also would like the group to meet sometime in March so that the work groups can provide the full Task Force with an update on their activities.

Mike Clements noted the importance for the work groups to move forward in policy development. Brooks instructed the work groups to meet prior to the March meeting.

10. The meeting adjourned at 4:10 p.m.

minutes11408.doc